

AB-13D - Symposium

**MEDIA HABITS AND INTERNET USAGE AMONG AMERICA'S YOUTH**

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The increased popularity and affordability of personal computing in recent years has put computers in many homes across the nation. This availability has also driven the cost of Internet access down so that many households can afford to subscribe to Internet service. This, along with the vast amount of quality information that is now available on the "Net," has led to increased Internet usage.

The Recruiting Services are taking advantage of this emerging technology to reach youth. YATS, with its national reach across American youth, is an obvious platform to measure Internet usage in general, and awareness of the Services' recruiting efforts in particular. Internet questions were first introduced to the YATS in 1996, and modified in 1997.

This paper compares youths' exposure to various media, including television, radio and print as well as the Internet. More detailed results on Internet usage show differences from 1996 to 1997, locations from which the Internet is accessed, and access levels to Service Web sites. Estimates and standard errors are presented separately for males and females, and some results are broken out by demographics such as age, race/ethnicity, and school status.

**Media Habits of Youth**

The 1997 YATS included media habits questions about TV, radio, magazines, newspaper, and the Internet:

*"How much time did you spend yesterday ...watching TV?...listening to the radio?"*

*...reading magazines?...reading newspapers?...on the Internet?"*

During the development of the questions, we found, without prompting, some people estimating time watching television took into account the time their television was on "in the background" and some did not. Similarly, some people estimating time listening to the radio took into account the time driving in their car and some did not. Consequently, we introduced two forms of television and radio questions, and randomly selected one of each pair to ask each respondent. Each respondent was asked 5 media habit questions, including one of the two versions about television, and one of the two versions about radio.

Because the media habits questions refer to a particular day of the week ("yesterday"), responses depended on the day of the week the YATS interview was conducted. For example, more youth watch television on Thursday evenings than on other evenings. Thus, weighting adjustments were made so that the statistics presented accurately represent the average for all 7 days of the week.

For each media activity, Table 1 presents the percentage of youth that stated they had spent "no time" on the previous day. The table also presents the average time (in minutes) for each specific media (those spending no time watching television, listening to the radio, etc., were not included in the average). For example, 68.2 percent of the males and 74.1 percent of the females reported they had not been on the Internet the day prior to their YATS interview. The average time on the Internet, among those who had been on, was 87.8 minutes for the men, 72.7 minutes for the women.

Clearly, youth spend far more time watching television and listening to the radio than they do reading newspapers and magazines. Youth spend far less time on the Internet than watching television or listening to the radio. But they spend more time on the Internet than reading magazines and newspapers.

Table 1. Media Habits, by Gender, 1997

| Question   | Males                    |                        | Females                  |                        |
|--|--------------------------|------------------------|--------------------------|------------------------|
|  | Percent Spending No Time | Mean Time (in Minutes) | Percent Spending No Time | Mean Time (in Minutes) |
| How much time did you spend <b>yesterday</b> ...?                  |                          |                        |                          |                        |
| Watching TV  | 14.8 (0.8)               | 132.6 (2.8)            | 17.7 (0.7)               | 131.5 (3.3)            |
| Watching TV, <u>including the time the TV was on as background</u> | 11.2 (0.6)               | 158.2 (3.0)            | 13.6 (0.7)               | 178.6 (4.7)            |
| Listening to the radio   | 14.9 (0.7)               | 148.6 (3.7)            | 17.1 (1.1)               | 140.4 (3.4)            |
| Listening to the radio, <u>including time spent in a car</u>       | 8.2 (0.6)                | 173.3 (3.3)            | 9.0 (0.8)                | 166.6 (4.9)            |
| Reading magazines  | 54.1 (0.7)               | 50.4 (0.9)             | 62.0 (0.8)               | 51.6 (1.2)             |
| Reading newspapers   | 41.0 (0.8)               | 34.7 (0.5)             | 50.3 (0.9)               | 34.6 (0.8)             |
| On the Internet  | 68.2 (0.8)               | 87.8 (2.8)             | 74.1 (0.9)               | 72.7 (2.8)             |

Note: Tabled values are percentages with standard errors in parentheses.

In general, the media habits of males and females are similar. Males are somewhat more likely than females to watch television, listen to the radio, read a magazine or newspaper, or get on the Internet on any particular day. Average times spent by men on the Internet and listening to the radio are somewhat greater. An exception: females spend more time with the television on "in the background" than males.

## Measures of Internet Usage

Internet questions first appeared in YATS in 1996, and more questions were added in 1997. In general, YATS determined the percent of youth who accessed the Internet, how often they accessed the Internet, how long they stayed on, where they accessed the

Internet from (home, school, work, etc.), and how they found specific sites on the Internet. YATS also asked about youth access to military home pages. The following results are presented by gender, age, race/ethnicity, and school status.

**Internet Access.** YATS respondents were asked:

*"Have you ever accessed or used the Internet [for something other than e-mail]?"*

The bracketed phrase, "for something other than e-mail," was added in the 1997. A biannual study of 7,500 U.S. households conducted by Computer Intelligence showed that electronic mail and Web surfing are the most common Internet applications. Since our objective was to evaluate Internet use as it might lead to information about military service, we excluded Internet use dedicated exclusively to e-mail. Table 2 shows the percent of youth responding affirmatively by different demographics.

These data show Internet access increased significantly among young people from 1996 to 1997. Among males, it increased from 53.0 percent to 64.3 percent. The increase among females, from 47.3 percent to 61.6 percent, was even higher, so that the difference in usage between males and females was reduced from 5.7 percentage points in 1996 to 2.7 percentage points in 1997.

Internet access increased among all the demographic groups shown in Table 2. It increased for both students and nonstudents at all levels of education. It increased for all age groups, and it increased among Whites, Blacks, and Hispanics. Since the 1997 question specifically excluded Internet usage limited to e-mail, and the 1996 question did not, the statistics in Table 2 may actually underestimate the increase in Internet usage.

The greatest demographic differences in Internet access are related to education. Less than one-third of high school non-completers say they have been on the Net in the past year; while over 90 percent of college graduates say they have been on the Net. Internet access was most common among college graduates and postsecondary/graduate students.

Table 2. Internet Usage, by Gender, Age, School Status and Race/Ethnicity, 1996-1997

| Question   | Males      |            | Females    |            |
|--|------------|------------|------------|------------|
|  | 1996       | 1997       | 1996       | 1997       |
| Have you ever accessed or used the Internet [for something other than e-mail]? |            |            |            |            |
| Total  | 53.0 (0.6) | 64.3 (0.6) | 47.3 (0.9) | 61.6 (0.8) |
| <u>Age</u>   |            |            |            |            |
| 16-17  | 54.4 (1.1) | 69.0 (1.3) | 47.8 (1.6) | 63.1 (1.4) |
| 18-19  | 54.0 (1.4) | 65.2 (1.3) | 49.5 (2.1) | 64.7 (1.7) |
| 20-21  | 52.8 (1.7) | 61.4 (1.2) | 49.6 (1.6) | 62.3 (2.0) |
| 22-24  | 51.1 (1.3) | 61.7 (1.5) | 44.0 (1.7) | 57.9 (1.7) |
| <u>Students</u>  |            |            |            |            |
| Non-senior high school student   | 51.8 (1.4) | 66.6 (1.6) | 42.1 (2.4) | 59.0 (1.8) |
| High school senior   | 52.7 (2.0) | 71.1 (1.7) | 51.3 (2.4) | 67.3 (2.0) |
| Postsecondary/Graduate student   | 78.4 (1.0) | 88.7 (0.8) | 69.4 (1.4) | 83.4 (1.1) |
| <u>Non-Students</u>  |            |            |            |            |
| Non-completer  | 23.8 (2.0) | 32.7 (1.6) | 20.1 (2.6) | 29.0 (2.1) |
| High school graduate   | 34.7 (1.6) | 45.0 (1.8) | 23.4 (2.0) | 35.1 (2.1) |
| Some college   | 50.4 (2.6) | 64.8 (3.1) | 42.7 (3.1) | 55.6 (3.1) |
| College graduate   | 85.7 (2.1) | 92.5 (1.7) | 71.8 (3.6) | 93.0 (1.8) |
| <u>Race/Ethnicity</u>  |            |            |            |            |
| White  | 59.1 (0.7) | 71.8 (0.7) | 54.0 (1.0) | 68.4 (0.9) |
| Black  | 34.9 (1.9) | 40.7 (2.7) | 30.7 (2.1) | 46.8 (2.4) |
| Hispanic   | 37.4 (1.5) | 50.5 (1.8) | 32.5 (2.4) | 43.0 (2.1) |

Note: Tabled values are percentages of the youth population with standard errors in parentheses.

Internet usage appears to decrease with age, particularly among young males (which are the primary focus of military recruiters). For example, in 1997 approximately 67 percent of 16-19 year-old males had accessed the Internet, compared to approximately 61 percent of 20-24 year-old males. These data do not show a clear relationship between age and Internet access among 16-21 year-old females (the differences are statistically insignificant), although fewer 22-24 year-old females than 16-21 females accessed the Internet.

The relationship one might expect between age, education, and Internet access is complex. If Internet access is increasingly encouraged and facilitated in high schools, for example, persons who have already graduated or dropped out of high school are less likely to access the Internet. This suggests Internet use would decline with age. If Internet use is encouraged more among postsecondary students than among high school students, one might expect Internet use to be more common among (older) college students than among (younger) high school students. Thus, large differences among educational groups in their Internet habits do not directly translate to relationships between age and Internet use.

In both 1996 and 1997, Internet access was clearly greater for Whites than minorities, regardless of gender. In 1997, Internet usage was significantly higher among White males (71.8 %) than Hispanic males (50.5 %), and significantly higher for Hispanic males than Black males (40.7 %). Access levels among Black females and Hispanic females did not differ significantly.

**Frequency of Internet Access.** Respondents who accessed the Internet were asked:

*"In the last year, how many times have you accessed the Internet?"*

Table 3 shows the frequency of Internet usage within the past year among youth who have been on the Internet. The question was open-ended— response options were not read to respondents. The levels shown in the table are the categories used by interviewers to tabulate responses. The results show that approximately 49 percent of male Internet users and 39 percent of female Internet users were accessing the Internet on at least a weekly basis.

| Table 3. Frequency of Internet Usage, by Gender, 1997                                      |            |             |            |             |
|--|------------|-------------|------------|-------------|
| Question   | Males      |             | Females    |             |
|  | Percent    | Cumulative  | Percent    | Cumulative  |
| In the last year, how many times have you accessed the Internet?                           |            |             |            |             |
| Almost daily   | 29.7 (0.6) | 29.7        | 20.5 (0.8) | 20.5        |
| Less than daily  | 19.6 (0.8) | <b>49.3</b> | 18.1 (0.8) | <b>38.6</b> |
| Less than weekly   | 17.2 (0.6) | 66.5        | 18.5 (1.0) | 57.1        |
| 6 – 11 times (less than monthly)   | 10.6 (0.6) | 77.1        | 10.7 (0.6) | 67.8        |
| 1 – 5 times  | 21.3 (0.5) | 98.4        | 30.0 (0.9) | 97.8        |
| Did not access within the past year  | 0.8 (0.2)  | 99.2        | 1.2 (0.2)  | 99.0        |
| Note: Tabled values are percentages of Internet users with standard errors in parentheses. |            |             |            |             |

**Locations from Which Users Access the Internet.** Respondents who said they had been on the Internet were also asked:

*"Where have you accessed or used the Internet?"*

The question was open-ended, and no response categories were suggested. In 1996, interviewers tabulated answers using the categories "Home," "School," "Work," "Library," and "Other." Respondents were encouraged to identify all the places from which they accessed the Internet, so multiple responses were allowed. Thus, the percentages in Table 4 add to more than 100 percent. A large percentage of 1996 responses did not fit any of the first four categories. Monitoring of interviews suggested that many youth were accessing the Internet from a friend's or relative's home, so the 1997 YATS survey included the category "Friend's/Relative's." Friend's/relative's location seem to have accounted for the majority of the "other" response which were observed in 1996. The categories "Cafe" and "Recruiter's Office" were also added, but few respondents mentioned accessing the Internet from these locations.

| Table 4. Location of Internet Usage, by Gender, 1996-1997 |            |            |            |            |
|---|------------|------------|------------|------------|
| Question  | Males      |            | Females    |            |
|   | 1996       | 1997       | 1996       | 1997       |
| Where have you accessed or used the Internet?             |            |            |            |            |
| School  | 60.5 (0.9) | 63.8 (0.8) | 60.3 (1.0) | 65.1 (1.0) |
| Home  | 47.3 (0.8) | 51.7 (0.8) | 41.6 (1.1) | 46.2 (1.3) |
| Work  | 14.1 (0.7) | 14.7 (0.6) | 13.0 (0.8) | 15.4 (0.7) |
| Library   | 6.6 (0.5)  | 13.1 (0.6) | 4.7 (0.4)  | 12.5 (0.7) |
| Friend's/Relative's                                       | --         | 34.8 (0.7) | --         | 29.3 (0.7) |
| Café  | --         | 1.4 (0.2)  | --         | 0.8 (0.2)  |
| Recruiter's office  | --         | 0.0 (n/a)  | --         | 0.0 (n/a)  |
| Other location  | 32.0 (0.9) | 2.8 (0.3)  | 25.5 (1.1) | 2.1 (0.3)  |

Note: Tabled values are percentages of Internet users with standard errors in parentheses.

Although over 60 percent of Internet users say they accessed the Net from school, it appears that the Net is most frequently accessed from private residences (home + friend's/relative's). Relatively few (about 1 in 8) Internet users report accessing the Internet from work. Fewer than 2 percent of Internet users mentioned cafes or similar commercial places for Internet access.

Internet access from libraries is small (about 1 in 8), but nearly doubled among males (from 6.6 percent in 1996 to 13.1 percent in 1997) and more than doubled among females (4.7 percent to 12.5 percent). The percent of Internet users mentioning each location increased significantly from 1996 to 1997 with one exception: the percent of male users mentioning work.

**Access of Military Web Sites.** Youth who had accessed the Internet were asked:

*"Have you ever seen or visited a home page for one of the military Services?"*

Those who responded "yes" were asked:

*"Have you ever seen or visited a home page which provides information about serving in the military?"*

Those who answered "yes" to this received the follow-on question: *"Which Services?"*

Results are shown in Table 5 and are of all youth, not just of the Internet users. Thus, 8.1 percent of all 16-24 year-old males and 4.1 percent of 16-24 year-old females had seen a Service Web page in 1997. While these percentages are small compared, say, to the percent of youth who had seen or heard military advertising, they more than doubled between 1996 and 1997.

Table 5 also shows the percentage of youth who had seen each specific Service's Web page containing information on serving in that Service. Exposure to this type of information more than doubled between 1996 and 1997 for all Services (except the

Coast Guard among females). While the percentages are still very small in magnitude (2 percent or less), the trend is very positive.

Table 5. Access of Military Web Sites, by Gender, 1996-1997

| Question   | Males     |           | Females   |           |
|--|-----------|-----------|-----------|-----------|
|  | 1996      | 1997      | 1996      | 1997      |
| Have you ever seen or visited a home page for one of the military Services?                                | 3.3 (0.2) | 8.1 (0.4) | 1.5 (0.2) | 4.1 (0.3) |
| Have you ever seen or visited a home page <u>which provides information about serving in the military?</u> | 1.8 (0.2) | 4.8 (0.3) | 0.8 (0.1) | 2.2 (0.2) |
| ...Which Services?   |           |           |           |           |
| Army   | 0.8 (0.1) | 2.0 (0.2) | 0.4 (0.1) | 0.7 (0.1) |
| Navy   | 0.6 (0.1) | 1.9 (0.2) | 0.3 (0.1) | 0.7 (0.1) |
| Marine Corps   | 0.7 (0.1) | 1.8 (0.2) | 0.2 (0.1) | 0.6 (0.1) |
| Air Force  | 0.7 (0.1) | 1.9 (0.2) | 0.3 (0.1) | 0.8 (0.0) |
| Coast Guard  | 0.1 (0.0) | 0.3 (0.1) | 0.1 (0.0) | 0.1 (0.0) |

Note: Tabled values are percentages of the total youth population with standard errors in parentheses.

## Summary of Media Habits and Internet Usage

This paper has presented findings on the media habits and Internet usage of young men and women. Results show on any particular day, most youth (83 to 89 percent) watch television and listen to the radio. Those who watch television or listen to the radio typically spend 2 hours or more doing so. In contrast, only about one-half of youth read a magazine or a newspaper on any particular day. Those who do read magazines or newspapers spend, on average, less than an hour doing so. Youth typically spend less time on the Internet than watching television or listening to the radio, but more time than reading magazines or newspapers. About one-third of men and one-fourth of women were on the Net on any particular day; on average, they spent more than an hour on the Net.

Internet usage has increased significantly from 1996 to 1997; the increase was greater among females than males. In 1997, more than three-fifths of both men and women reported they had been on the Net. Nearly one-third of men and one-fourth of women report they are on the Net at least weekly. Internet access varies with education: over 90 percent of college graduates report they have been on the Net; less than one-third of high school non-completers report they have been on the Net. More college students than high school students have been on the Net.

Over 60 percent of Internet users access the Net from school, about one-half from their home, and one-third from a friend or relative's home. About one-sixth of Internet users report accessing the Net from work or from libraries. Access from libraries doubled (among men) or tripled (among women) from 1996 to 1997. The locations where Internet users access the Net are predictable: Nonstudents with more education (and presumably greater affluence) are more likely to access the Net from home. Younger respondents are more likely to access the Net from a friend or relative's house.

Relatively few youth (8 percent of all young men and 4 percent of young women)

reported they had visited a home page for one of the military Services. Even fewer reported they had visited a home page that provides information about serving in the military. About 2 percent of men and less than 1 percent of women reported visiting Web sites of specific Services. However, in almost all instances, the percent of youth visiting a military home page in 1997 was at least double the 1996 statistic. Thus, the Internet holds promise as a significant means for the Services to provide information on military service to interested, technically savvy youth.

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